

What is claimed is:

1. A system for providing assistance to emergency personnel which comprises:

5

means for detecting the presence of personnel within a protected premises;

means for detecting an imminent threat selected from the group consisting of fire, seismological and terrorist events;

10

means, responsive to the means for detecting, for displaying the location of personnel within protected premises.

2. A system for providing assistance to emergency personnel as described in claim 1 including apparatus for storing the location of personnel within protected premises.

15

3. A system for providing assistance to emergency personnel as described in claim 2 wherein said apparatus for storing location of personnel includes nonvolatile memory.

20

4. A system for providing assistance to emergency personnel as described in claim 3 wherein said apparatus for storing is capable of storing such data for a plurality of time periods.

25

5. A system for providing assistance to emergency personnel as described in claim 1 wherein said means for detecting an imminent threat includes an ionization-type detector.

30

6. A system for providing assistance to emergency personnel as described in claim 1 wherein said means for detecting an imminent threat includes a photoelectric detector.

7. A system for providing assistance to emergency personnel as describing claim 1 that utilizes fuzzy logic.
8. A system for providing assistance to emergency personnel as described in 5 claim 1 that utilizes Boolean logic.
9. A system for providing assistance to emergency personnel as described in claim 1 that utilizes temperature sensing.
- 10 10. A system for providing assistance to emergency personnel as describing claim 1 that includes at least one thermistor.
11. A system for providing assistance to emergency personnel as describing claim 10 that includes a plurality of thermistors.
- 15 12. A system for providing assistance to emergency personnel as described in claim 4 further including structure for determining the last known good position information.
- 20 13. A system for providing assistance to emergency personnel as described in claim 1 wherein said means for detecting includes ultrasonic apparatus.
14. A system for providing assistance to emergency personnel as described in claim 1 includes microwave apparatus.
- 25 15. A system for providing assistance to emergency personnel as described in claim 1 that includes infrared sensing.
16. A system for providing assistance to emergency personnel as described 30 in claim 1 that includes both passive infrared and microwave sensors.

17. A system for providing assistance to emergency personnel as described in claim 1 wherein said means responsive to said means for detecting for displaying the location of personnel within protected premises relies on a logic circuit for responsiveness.

5

18. A system for providing assistance to emergency personnel as described in claim 1 wherein said means responsive to said means for detecting for displaying the location of personnel within protected premises relies on a microprocessor for responsiveness.

10

19. A system for providing assistance to emergency personnel as described in claim 1 wherein the means for displaying the location of personnel within protected premises includes a floor plan on which the locations are defined.

15

20. A system for providing assistance to emergency personnel as describing claim 1 wherein the means for displaying includes wireless means for remotely displaying the location of personnel within protected premises.

20

21. A system for providing assistance to emergency personnel which comprises:

25

means for detecting the presence of personnel within a protected premises and means for storing the location of personnel within protected premises that includes nonvolatile memory and which is capable of storing such data for a plurality of time periods;

means for detecting an imminent threat selected from the group consisting of a fire, seismological and terrorist events;

30

means, responsive to the means for detecting, for displaying the location of personnel within protected premises.

22. A system for providing assistance to emergency personnel as described in claim 21 wherein said means for detecting an imminent threat utilizes portions selected from the group consisting of an ionization-type detector, a photoelectric detector, fuzzy logic, Boolean logic, temperature sensing, and at 5 least one thermistor.

23. A system for providing assistance to emergency personnel as described in claim 22 further including structure for determining the last known good position information.

10 24. A system for providing assistance to emergency personnel as described in claim 21 wherein said means for detecting includes ultrasonic apparatus.

25. A system for providing assistance to emergency personnel as described 15 in claim 21 wherein said means includes microwave apparatus.

26. A system for providing assistance to emergency personnel as described in claim 21 wherein said means for detecting includes infrared sensing.

20 27. A system for providing assistance to emergency personnel as described in claim 21 that includes both passive infrared and microwave sensors.

25 28. A system for providing assistance to emergency personnel as described in claim 21 wherein said means responsive to said means for detecting for displaying the location of personnel within protected premises relies on a logic circuit for responsiveness.

30 29. A system for providing assistance to emergency personnel as described in claim 21 wherein said means responsive to said means for detecting for displaying the location of personnel within protected premises relies on a microprocessor for responsiveness.

30. A system for providing assistance to emergency personnel as described in claim 21 wherein the means for displaying the location of personnel within a protected premises includes a floor plan on which the locations are defined.

5 31. A system for providing assistance to emergency personnel as describing claim 21 wherein the means for displaying includes wireless means for remotely displaying the location of personnel within protected premises.

10 32. A system for providing assistance to emergency personnel as describing claim 21 wherein the means for displaying includes a graphic keypad and a security panel that allows selective visual monitoring and selective audio monitoring of a plurality of locations within protected premises.

15 33. A system for providing assistance to emergency personnel which comprises:

means for detecting the presence of personnel within a protected premises and means for storing the location of personnel within protected premises that includes nonvolatile memory and which is capable of storing such data for a 20 plurality of time periods;

means for detecting an imminent threat that utilizes at least one portion selected from the group consisting of an ionization-type detector, a photoelectric detector, fuzzy logic, Boolean logic, temperature sensing, at 25 least one thermistor, ultrasonic apparatus, microwave apparatus, and infrared sensing;

means, responsive to the means for detecting, for displaying the location of personnel within protected premises that includes portions selected from the 30 group selected from the group consisting of a logic circuit, a microprocessor, a floor plan on which the locations are defined, wireless means for remotely displaying the location of personnel within protected premises and a graphic keypad and a security panel that allows selective visual monitoring and selective audio monitoring of a plurality of locations within protected premises.

34. A method for providing assistance to emergency personnel which includes:

- 5 detecting the presence of personnel within a protected premises;
- detecting an imminent threat selected from the group consisting of a fire, seismological and terrorist events;
- 10 displaying the location of personnel within protected premises when an imminent threat is detected.

35. A method for providing assistance to emergency personnel as described in claim 34 further including the step of storing the location of personnel within

15 protected premises.

36. A method for providing assistance to emergency personnel as described in claim 34 wherein the step of storing the location of personnel nonvolatile memory.

20

- 37. A method for providing assistance to emergency personnel as described in claim 36 wherein the step of storing the location of personnel includes the step of storing data for personnel within a protected premises for each of a plurality of time periods.

25

- 38. A method for providing assistance to emergency personnel as described in claim 34 wherein the step of detecting an imminent threat includes providing apparatus that includes a complement selected from (a.) ionization-type detector, (b) a photoelectric detector, (c) fuzzy logic, (d) Boolean logic, (e) temperature sensing, (f) ultrasonic apparatus, (g) at least one thermistor, (h) microwave apparatus and (i) infrared sensing.

39. A method for providing assistance to emergency personnel as described in claim 34 further including the step of determining the last known good position information.

--